

MATRICULATION AND SECONDARY EDUCATION CERTIFICATE EXAMINATIONS BOARD
UNIVERSITY OF MALTA, MSIDA
MATRICULATION EXAMINATION
INTERMEDIATE LEVEL
SEPTEMBER 2016

SUBJECT:	HOME ECONOMICS & HUMAN ECOLOGY
DATE:	31st August 2016
TIME:	9:00 a.m. to 12:05 p.m.

SECTION A**ANSWER ALL QUESTIONS (Total 40 marks)**

1. Lipids are classified as *saturated* and *unsaturated* fatty acids. With the aid of diagrams, explain the chemical composition of **EACH** and outline the difference between these two types of fatty acids. (2, 2 marks)
2. Some dishes are based on *complementary protein*.
 - a) Explain the italicised term and give **TWO** examples of such dishes.
 - b) Outline **TWO** benefits of consuming dishes based on complementary protein instead of other HBV protein dishes. (2, 2 marks)
3. Outline **TWO** positive impacts of genetic engineering of crops and **TWO** positive impacts of food irradiation for:
 - a) the food producers;
 - b) the world population. (2, 2 marks)
4. Define the term *essential fatty acids*. Explain how omega-3 fatty acids help to protect against heart disease. Name **TWO** food sources of this type of fatty acid. (1, 2, 1 mark)
5. Define the following **FOUR** terms that are found in both home and health insurance policies:
 - a) Premium;
 - b) Policyholder;
 - c) Indemnity;
 - d) Claim. (4 marks)
6. EU legislation stipulates that packaged foods should provide consumers with information regarding the food product being sold.
 - a) Apart from the *best before* and *use by* date, identify **FOUR** types of information that food manufacturers must provide by law on packaged foods.
 - b) Explain the difference between the *best before* and the *use by* date. Give an example of **ONE** food where one would expect to find **EACH** of the mentioned date marks. (2, 1, 1 mark)

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7. Saving water and electricity by consumers has a positive impact on the local and global environment.
- Suggest **TWO** ways (**ONE** for each) how saving water and electricity affects the local environment positively.
 - Give **ONE** reason why the global environment also benefits from such practices.
 - Suggest **TWO** environmentally-friendly choices one can adopt when purchasing or using electrical equipment. (2, 1, 1 mark)
8. Hire purchase is a popular method of payment among Maltese consumers.
- Define the term *hire purchase*.
 - Outline **TWO** advantages and **ONE** disadvantage of this method of payment for a single parent who would like to buy furniture for her child's bedroom. (1, 3 marks)
9. Describe **TWO** state support provisions that are offered to parents of a newborn baby who has been diagnosed with a disability. (2, 2 marks)
10. Play has an important role in stimulating children's intellectual and emotional development.
- Identify **ONE** toy which would help children develop intellectually in **EACH** type of skill mentioned below, and give **ONE** reason for your choice.
 - Learning to read new words;
 - Counting numbers;
 - Writing letters of the alphabet.
 - Explain how **ONE** other toy or activity of your choice could help an 8-year old child who lost a family member to come to terms with the emotional trauma. (3, 1 mark)

SECTION B (60 marks)

ANSWER ANY THREE QUESTIONS

Question 1

- A.** A young couple both work full time and have two school-aged children. They strive to prepare healthy lunches and meals for the whole family.
- Outline **THREE** technological and **TWO** psychological factors that could affect their choice of food and meal planning. (3, 2 marks)
 - Suggest **TWO** ways how the couple could save money and at the same time make healthy choices when shopping for **EACH** of the following:
 - fruits and vegetables;
 - meat and fish;
 - milk and staple foods (e.g., rice and pasta). (6 marks)
- B.** More people today are being diagnosed as suffering from some form of food intolerance or food allergy.
- Explain the difference between a *food allergy* and a *food intolerance*. (2 marks)
 - Define the term *coeliac* and describe the effects on the body if a coeliac person incidentally eats unsuitable food. (2, 2 marks)
 - Briefly discuss **THREE** factors that should be kept in mind by a group of youngsters when dining out during the weekend, bearing in mind that one of them is coeliac. (3 marks)

Question 2

Retirement villages are an innovative concept of elderly living that are being introduced locally.

- a) Outline the benefits of these complexes for:
 - i. the elderly;
 - ii. their relatives. (4, 4 marks)
- b) Prior to the setting up of these villages, the project management team have to cater for the *social, physical* and *emotional* wellbeing of the elderly residing in these complexes. Briefly describe **FOUR** activities and/or amenities that can be offered in such complexes to see to **EACH** of the italicized forms of wellbeing. (2, 2, 2 marks)
- c) These villages should not become isolation places for elderly people. Explain how the project management team of such complexes can ensure the residents' interaction with the community at large. (6 marks)

Question 3

A. It is vital for pregnant women to consume calcium and folic acid rich foods.

- a) i. Identify **ONE** mineral (other than calcium) and **ONE** vitamin, which are essential for maintaining bone health during pregnancy.
- ii. In relation to bone health, outline the main function, of the mineral and the vitamin mentioned in (i). (1, 2 marks)
- b) Give **TWO** reasons why calcium present in milk and dairy products is easily absorbed by the body, and **ONE** reason why calcium present in pulses may not be so easily absorbed. (3 marks)
- c) Name **TWO** plant sources of calcium, other than pulses. (1 mark)
- d) Outline the main reason why a sufficient intake of folic acid is important as from the early stages of pregnancy, and name **TWO** dietary sources of folic acid other than green leafy vegetables. (1, 1 mark)
- e) Folic acid is a very unstable vitamin. Suggest **ONE** way how one could ensure maximum folic acid presence or retention in green leafy vegetables in **EACH** of the following situations:
 - i. when shopping for these foods;
 - ii. during cooking;
 - iii. when using them in the preparation of salads. (3 marks)

B. Vegans may suffer from iron deficiency.

- a) Identify the deficiency disease which is commonly associated with a lack of iron and state **THREE** symptoms of this condition. (2 marks)
- b) Identify **TWO** sources of iron which are suitable for a teenager who follows a vegan diet. (1 mark)
- c) i. Plan a packed lunch for a vegan, including a suitable beverage.
- ii. Outline **TWO** ways how the different ingredients present in the lunch ensure an adequate supply of iron which is efficiently absorbed by the body. (3, 2 marks)

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Question 4

Food choice depends on *accessibility, availability, retailing methods, market influences* and *global influences*.

- a) Explain how the italicized factors influence consumers' food choices. (10 marks)
- b) Advertising also has a great impact on consumer food choices. Outline **TWO** positive and **TWO** negative impacts of food advertisements for:
 - i. the consumers
 - ii. the retailers. (4, 4 marks)
- c) A local food producer would like to advertise his/her products for a particular festive season. Identify the best way for the producer to advertise his/her products, giving reasons for your choice. (2 marks)